The Faculty of Applied Sciences and Computing (FASC) has evolved from the well-established and reputable School of Arts and Science (SAS) of the renowned Tunku Abdul Rahman College (TARC) which was established in February 1972.

The Faculty of Applied Sciences and Computing (FASC) currently runs programmes at Diploma, Bachelor and Masters levels. The Faculty continues the academic collaboration arrangement with the Campbell University, USA to offer Dual Award Degree to the students. In this academic arrangement, the programme structures and syllabi of FASC programmes are designed and arranged so that students will be simultaneously prepared for the programme in FASC in conjunction with the Bachelor of Science (BS) degree of Campbell University, Buies Creek, North Carolina, USA.

The Faculty continues to strive for education excellence by providing high quality education at undergraduate and postgraduate level as well as to excel in research and industry collaborations.

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- Enterprise Information Systems
- Software Systems Development
- Internet Technology
- Information Security
- Applied Physics (Instrumentation)
- Microelectronics (Embedded Technology)
- Sports and Exercise Science
- Food Science

Diploma
- Chemistry and Biology
- Computer Science and Statistics
- Computer Science and Management Mathematics
- Computer Science and Computer Mathematics
- Business Information Systems
- Interactive Software Technology
- Information Systems Engineering
- Internet Technology
- Microelectronics and Physics
- Microelectronics with Computer Communications
- Microelectronics with Automatic Control
- Sport and Exercise Science
- Food Science
- Aquaculture
- IT (Entrepreneurship)
- IT (Mobile Application Development)
- IT (ICT Systems Support)
- Data Science
### PROGRAMMES OFFERED

<table>
<thead>
<tr>
<th>Diploma (2 years)</th>
<th>Bachelor Degree (3 years)</th>
<th>Dual Award with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma in Science (Chemistry and Biology)</td>
<td>• Bachelor of Science (Honours) in Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td>Diploma in Interactive Software Technology</td>
<td>• Bachelor of Science (Honours) in Bioscience with Chemistry</td>
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</tr>
<tr>
<td>Diploma in Science (Computer Science and Statistics)</td>
<td>• Bachelor of Science (Honours) in Management Mathematics with Computing</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Computer Science and Management Mathematics)</td>
<td>• Bachelor of Information Technology (Honours) in Software Systems Development</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Computer Science and Computer Mathematics)</td>
<td>• Bachelor of Science (Honours) in Software Engineering</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Business Information Systems)</td>
<td>• Bachelor of Information Systems (Honours) in Enterprise Information Systems</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Information Systems Engineering)</td>
<td>• Bachelor of Information Technology (Honours) in Software Systems Development</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Internet Technology)</td>
<td>• Bachelor of Information Technology (Honours) in Internet Technology</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Microelectronics and Physics)</td>
<td>• Bachelor of Science (Honours) in Applied Physics (Instrumentation)</td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Microelectronics with Computer Communications)</td>
<td>• Bachelor of Science (Honours) in Microelectronics (Embedded Technology)</td>
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</tr>
<tr>
<td>Diploma in Science (Microelectronics with Automatic Control)</td>
<td>• Bachelor of Science (Honours) in Microelectronics (Embedded Technology)</td>
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</tr>
<tr>
<td>Diploma in Sport and Exercise Science</td>
<td>• Bachelor of Science (Honours) in Sports and Exercise Science</td>
<td></td>
</tr>
<tr>
<td>Diploma in Food Science</td>
<td>• Bachelor of Science (Honours) in Food Science</td>
<td></td>
</tr>
<tr>
<td>Diploma in Aquaculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma in Information Technology (Entrepreneurship)</td>
<td></td>
<td></td>
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<tr>
<td>Diploma in Information Technology (Mobile Application Development)</td>
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<tr>
<td>Diploma in Information Technology (ICT Systems Support)</td>
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<td></td>
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<tr>
<td>Diploma in Computer Science (Data Science)</td>
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</tbody>
</table>

For more information on Dual Award and fees, please refer to Page 15.

Partner universities for the Dual Award programmes may change from time to time to ensure the best value and quality is offered to students. Students are advised to obtain the latest information on Dual Award partner university for their programme from the relevant faculty.
<table>
<thead>
<tr>
<th>BACHELOR DEGREE</th>
<th>STPM</th>
<th>A Level</th>
<th>ENTRY QUALIFICATION</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science (Honours) in Bioscience with Chemistry</td>
<td>Full Pass in Biology and Chemistry</td>
<td>Pass in Biology and Chemistry</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in Biology and Chemistry</td>
<td>Grade B in 5 relevant subjects which must include Biology and Chemistry</td>
<td>• Foundation in Science (Track B) OR&lt;br&gt;• Diploma in Science (Chemistry &amp; Biology)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>AND SPM Credit/O Level Grade C in Mathematics/UEC Grade B in Advanced Mathematics (I or II)</td>
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<td></td>
<td></td>
<td>AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science (Honours) in Analytical Chemistry</td>
<td>Full Pass in Chemistry and Mathematics</td>
<td>Pass in Chemistry and Mathematics</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in Chemistry and one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Chemistry and Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A/Track B) OR&lt;br&gt;• Diploma in Science (Chemistry &amp; Biology)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Computer Science (Honours) in Interactive Software Technology</td>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics/Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A) OR&lt;br&gt;• Diploma in Interactive Software Technology (with minimum CGPA 2.5000)*</td>
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<td></td>
<td></td>
<td></td>
<td>AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# Graduates with CGPA below 2.5000 are required to sit and pass a Qualifying Test.
** Grade C and above in A-Level/UEC conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC level.

Note:
1. The entry requirements must be taken from only ONE (1) examination sitting.
2. Students without a credit in SPM Bahasa Malaysia are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
3. TARC/TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
4. Equivalent qualifications other than the above will be considered on a case-by-case basis.
5. Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.
### Minimum Entry Requirements

<table>
<thead>
<tr>
<th>Bachelor of Science (Honours) in Management Mathematics with Computing</th>
<th>STPM</th>
<th>A Level</th>
<th>ENTRY QUALIFICATION</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td></td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>ATAR 70 and minimum Grade B in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics/Advanced Mathematics (I or II)</td>
<td>Foundation in Science (Track A) OR Diploma in Science (with minimum CGPA 2.5000)*</td>
</tr>
<tr>
<td>SPM Credit/O Level Grade C in Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</table>

<table>
<thead>
<tr>
<th>Bachelor of Computer Science (Honours) in Software Engineering</th>
<th>STPM</th>
<th>A Level</th>
<th>ENTRY QUALIFICATION</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td></td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>ATAR 70 and minimum Grade B in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics/Advanced Mathematics (I or II)</td>
<td>Foundation in Science (Track A) OR Diploma in Science (Computer Science &amp; Computer Mathematics) (with minimum CGPA 2.5000)*</td>
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<tr>
<td>SPM Credit in Additional Mathematics/O Level Grade C in Mathematics-Additional</td>
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</tr>
<tr>
<td>SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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<table>
<thead>
<tr>
<th>Bachelor of Information Systems (Honours) in Enterprise Information Systems</th>
<th>STPM</th>
<th>A Level</th>
<th>ENTRY QUALIFICATION</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td></td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>ATAR 70 and minimum Grade B in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics/Advanced Mathematics (I or II)</td>
<td>Foundation in Science (Track A/Track B) OR Diploma in Science (with minimum CGPA 2.5000)*</td>
</tr>
<tr>
<td>SPM Credit/O Level Grade C in Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

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**Note:**

- Graduates with CGPA below 2.5000 are required to sit and pass a Qualifying Test.
- Grade C and above in AELE0364 English Language (1119 Level) conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC level.

---

a) The entry requirements must be taken from only ONE (1) examination sitting.
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d) Equivalent qualifications other than the above will be considered on a case-by-case basis.
e) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.
### Minimum Entry Requirements

<table>
<thead>
<tr>
<th>Bachelor of Information Technology (Honours) in Software Systems Development</th>
<th>STPM</th>
<th>A Level</th>
<th>ENTRY QUALIFICATION</th>
<th>CPU</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>ATAR 70 and Grade B in one Mathematics subject</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A/Track B)</td>
<td>• Diploma in Science (with minimum CGPA 2.5000)*</td>
</tr>
<tr>
<td>AND</td>
<td>SPM Credit/O Level</td>
<td>Grade C in Mathematics</td>
<td>AND</td>
<td>SPM Pass/O Level</td>
<td>Grade E/UEC</td>
<td>Grade C in English Language**</td>
</tr>
<tr>
<td>Bachelor of Information Technology (Honours) in Internet Technology</td>
<td>Full Passes in 2 relevant subjects which must include Mathematics</td>
<td>Grade C in 2 relevant subjects which must include Mathematics</td>
<td>ATAR 70 and minimum Grade B in one Mathematics subject</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A/Track B)</td>
</tr>
<tr>
<td>AND</td>
<td>SPM Credit/O Level</td>
<td>Grade C in Mathematics</td>
<td>AND</td>
<td>SPM Pass/O Level</td>
<td>Grade E/UEC</td>
<td>Grade C in English Language**</td>
</tr>
<tr>
<td>Bachelor of Science (Honours) in Applied Physics (Instrumentation)</td>
<td>Full Pass in Physics and Mathematics</td>
<td>Pass in Physics and Mathematics</td>
<td>ATAR 70 and minimum Grade B in Physics and one Mathematics subject</td>
<td>70% average in 6 relevant subjects which must include minimum 70% in Physics and one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Physics and Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A)</td>
</tr>
<tr>
<td>AND</td>
<td>SPM Pass/O Level</td>
<td>Grade E/UEC</td>
<td>Grade C in English Language**</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

# Graduates with CGPA below 2.5000 are required to sit and pass a Qualifying Test.

** Grade C and above in AELE0364 English Language (1119 Level) conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC level.

Note:

a) The entry requirements must be taken from only ONE (1) examination sitting.
b) Students without a credit in SPM Bahasa Malaysia are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
c) TARC/TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
d) Equivalent qualifications other than the above will be considered on a case-by-case basis.
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<table>
<thead>
<tr>
<th>Bachelor Degree</th>
<th>STPM</th>
<th>A Level</th>
<th>Entry Qualification</th>
<th>UEC</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science (Honours) in Microelectronics (Embedded Technology)</td>
<td>Full Pass in Physics and Mathematics</td>
<td>Grade C in Physics and Mathematics</td>
<td>ATAR 70 and minimum Grade B in Physics and one Mathematics subject</td>
<td>Grade B in 5 relevant subjects which must include Physics and Advanced Mathematics (I or II)</td>
<td>• Foundation in Science (Track A) OR Diploma in Science OR Microelectronics with Computer Communications OR Microelectronics with Automatic Control OR Microelectronics and Physics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>70% average in 6 relevant subjects which must include minimum 70% in Physics and one Mathematics subject</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>AND SPM Credit/O Level Grade C in Mathematics AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science (Honours) in Sports and Exercise Science</td>
<td>Full Passes in 2 relevant subjects</td>
<td>Passes in 2 relevant subjects</td>
<td>ATAR 70 and minimum Grade B in 2 relevant subjects</td>
<td>Grade B in 5 relevant subjects which must include a science related subject</td>
<td>• Foundation in Science (Track A) OR Diploma in Sports (Track A) OR Diploma in Sport &amp; Exercise Science</td>
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<td>AND SPM Pass/O Level Grade E in a science related subject</td>
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<td></td>
<td>AND SPM Credit/O Level Grade C in Mathematics/UEC Grade B in one Mathematics subject</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science (Honours) in Food Science</td>
<td>Full Passes in 2 relevant subjects which must include Chemistry</td>
<td>Passes in 2 relevant subjects which must include Chemistry</td>
<td>ATAR 70 and minimum Grade B in Chemistry</td>
<td>Grade B in 5 relevant subjects which must include Chemistry</td>
<td>• Foundation in Science (Track A/Track B) OR Diploma in Food Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>70% average in 6 relevant subjects which must include minimum 70% in Chemistry</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AND SPM Credit/O Level Grade C in Mathematics/UEC Grade B in Advanced Mathematics (I or II)</td>
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<td></td>
<td>AND SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</tbody>
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Note:
1) The entry requirements must be taken from only ONE (1) examination sitting.
2) Students without a credit in SPM Bahasa Malaysia are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
3) TARC/TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
4) Equivalent qualifications other than the above will be considered on a case-by-case basis.
5) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.
## Minimum Entry Requirements

<table>
<thead>
<tr>
<th>DIPLOMA</th>
<th>SPM#</th>
<th>ENTRY QUALIFICATION</th>
<th>TARC/TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma in Science (Chemistry and Biology)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
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<tr>
<td>Compulsory subjects:</td>
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</tr>
<tr>
<td>(i) SPM Credit/O Level Grade C in Mathematics/UEC Grade B in Advanced Mathematics (I or II)</td>
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</tr>
<tr>
<td>(ii) SPM Credit/O Level Grade C/UEC Grade B in Biology</td>
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<td></td>
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<tr>
<td>(iii) SPM Credit/O Level Grade C/UEC Grade B in Chemistry</td>
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<td>(iv) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</tr>
<tr>
<td>Diploma in Science (Microelectronics and Physics)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
</tr>
<tr>
<td>Compulsory subjects:</td>
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</tr>
<tr>
<td>(i) SPM Credit in Additional Mathematics/O Level Grade C in Mathematics-Additional/UEC Grade B in Advanced Mathematics (I or II)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(ii) SPM Credit/O Level Grade C/UEC Grade B in Physics</td>
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</tr>
<tr>
<td>(iii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Microelectronics with Computer Communications)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
</tr>
<tr>
<td>Compulsory subjects:</td>
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<td></td>
</tr>
<tr>
<td>(i) SPM Credit in Additional Mathematics/O Level Grade C in Mathematics-Additional/UEC Grade B in Advanced Mathematics (I or II)</td>
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<td></td>
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</tr>
<tr>
<td>(ii) SPM Credit/O Level Grade C/UEC Grade B in one science subject.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(iii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</tr>
<tr>
<td>Diploma in Science (Computer Science and Computer Mathematics)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
</tr>
<tr>
<td>Compulsory subjects:</td>
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</tr>
<tr>
<td>(i) SPM Credit in Additional Mathematics/O Level Grade C in Mathematics-Additional/UEC Grade B in Advanced Mathematics/Advanced Mathematics (I or II)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(ii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</tr>
<tr>
<td>Diploma in Interactive Software Technology</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
</tr>
<tr>
<td>Compulsory subjects:</td>
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<tr>
<td>(i) SPM Credit in Additional Mathematics/O Level Grade C in Mathematics-Additional/UEC Grade B in Advanced Mathematics/Advanced Mathematics (I or II)</td>
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<tr>
<td>(ii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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</tr>
<tr>
<td>Diploma in Science (Computer Science and Statistics)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
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<td>(i) SPM Credit in Mathematics and Pass in Additional Mathematics OR O Level Grade C in Mathematics and Grade E in Mathematics-Additional OR UEC Grade B in Advanced Mathematics/Advanced Mathematics (I or II)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(ii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Diploma in Science (Computer Science and Management Mathematics)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
</tr>
<tr>
<td>Compulsory subjects:</td>
<td></td>
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</tr>
<tr>
<td>(i) SPM Credit/O Level Grade C in Mathematics/UEC Grade B in one Mathematics subject.</td>
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</tr>
<tr>
<td>(ii) SPM Pass/O Level Grade E/UEC Grade C in English Language**</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

# Students with 3-4 relevant credits in SPM/Grade C in 3-4 relevant subjects in O Level may be considered for the Diploma programmes offered at the Perak Branch Campus (PK), Johor Branch Campus (JH), Pahang Faculty Branch (PH) and Sabah Faculty Branch (SB).

** Grade C and above in ALELE9364 English Language (1119 Level) conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC level.

Note:
- a) SPM holders must have at least a pass in Bahasa Malaysia and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.
- b) The entry requirement must be taken from only ONE (1) examination sitting.
- c) Students without a credit in SPM Bahasa Malaysia are required to pass Bahasa Kebangsaan A before the award of Diploma.
- d) Equivalent qualifications other than the above will be considered on a case-by-case basis.
- e) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.
### Minimum Entry Requirements

<table>
<thead>
<tr>
<th>DIPLOMA</th>
<th>SPM#</th>
<th>ENTRY QUALIFICATION</th>
<th>UEC</th>
<th>TARC/ TAR UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma in Science (Business Information Systems)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>Relevant Certificate</td>
</tr>
<tr>
<td>Diploma in Science (Information Systems Engineering)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Science (Internet Technology)</td>
<td>5 credits in the relevant subjects</td>
<td>5 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Sport and Exercise Science</td>
<td>3 credits in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Food Science</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Aquaculture</td>
<td>3 credits in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Information Technology (Entrepreneurship)</td>
<td>3 credits in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Information Technology (ICT Systems Support)</td>
<td>3 credits in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
<tr>
<td>Diploma in Information Technology (Mobile Application Development)</td>
<td>3 credits in the relevant subjects</td>
<td>3 Grade C in the relevant subjects</td>
<td>3 Grade B in the relevant subjects</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Compulsory subjects:

1. **SPM Credit/O Level**
   - Grade C in Mathematics/UEC Grade B in one Mathematics subject.
2. **SPM Pass/O Level**
   - Grade E/UEC Grade C in English Language**

#### Notes:

- Students with 3-4 relevant credits in SPM/Grade C in 3-4 relevant subjects in 0 Level may be considered for the Diploma programmes offered at the Perak Branch Campus (PK), Johor Branch Campus (JH), Pahang Faculty Branch (PH) and Sabah Faculty Branch (SB).

- Grade C and above in AELE0364 English Language (1119 Level) conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC level.

- Equivalent qualifications other than the above will be considered on a case-by-case basis.

- Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.
## Bachelor of Science (Honours) in Bioscience with Chemistry

**3 years**

**PROGRAMME OVERVIEW**

This programme equips students with an in-depth understanding of the core principles and methodologies underlying current biotechnological research, thus, able to pursue careers in bioscience and biotechnology either in industry or academic research. In this programme, students are able to develop the transferable qualities and skills required for employment or research in the biotechnologies sector. Bioscience students are not only trained in laboratory and research skills but also in relevant business and entrepreneurial skills. Students will have an opportunity to work with industry through their internship and to carry out a real-life research project in bioscience area. All such training will add value to their qualification and benefit their employment.

This programme is endorsed by Institut Kimia Malaysia (IKM). Graduates of this programme can join IKM as a member and can be recognised as a ‘Registered Chemist’ in Malaysia.

**CAREER PROSPECTS**

- Research Scientists
- Chemists
- Quality Control/Assurance Executives
- Marketing & Sales Executives
- Life Science Technologists
- Biochemists
- Microbiologists
- Life Sciences Product Specialists
- Biotechnologists
- Occupational Health and Safety Specialists
- Environmentalists

**PROGRAMME OUTLINE (TOTAL CREDITS: 125)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Biology</td>
<td></td>
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<tr>
<td>Ecology and Biodiversity</td>
<td></td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>Cell Biomolecules and Enzymes</td>
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<tr>
<td>Principles of Genetics</td>
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<tr>
<td>Recombinant Technology</td>
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<tr>
<td>Physiology and Behaviour of Plants</td>
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<tr>
<td>Metabolic Biochemistry</td>
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<tr>
<td>Molecular Biology</td>
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<tr>
<td>Integrative Physiology</td>
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<tr>
<td>Immunology</td>
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<tr>
<td>Techniques and Applications in Molecular Biosciences</td>
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<tr>
<td>Cell and Tissue Culture</td>
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<tr>
<td>Physical Chemistry</td>
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<tr>
<td>Organic Chemistry</td>
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<tr>
<td>Inorganic Chemistry</td>
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<tr>
<td>Analytical Chemistry</td>
<td></td>
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<tr>
<td>Kinetics, Mechanism and Stereochemistry</td>
<td></td>
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<tr>
<td>Spectroscopy and Properties of Organic Compounds</td>
<td></td>
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<tr>
<td>Instrumental Methods of Chemical Analysis</td>
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<tr>
<td>Environmental Chemistry and Analysis</td>
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<tr>
<td>Polymer Chemistry</td>
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<tr>
<td>Calculus and Algebra</td>
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<tr>
<td>Basic Statistical Methods for Scientific Analysis</td>
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<tr>
<td>Project</td>
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<tr>
<td>Industrial Training or 2 elective courses</td>
<td></td>
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<tr>
<td>Bioscience Elective I (Choose 2)</td>
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<tr>
<td>Biochemistry</td>
<td></td>
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<tr>
<td>Advanced Microbiology</td>
<td></td>
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<tr>
<td>- Genomics, Proteomics and Bioinformatics</td>
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<tr>
<td>- Cancer Biology</td>
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<tr>
<td>- Reproduction and Developmental Biology</td>
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<tr>
<td>- Nutrition in Health and Diseases</td>
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<tr>
<td>Conservation Biology</td>
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<tr>
<td>Industrial Microbiology</td>
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<tr>
<td>- Medicinal Biochemistry</td>
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<tr>
<td>Chemistry Elective I</td>
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<tr>
<td>(Choose 1)</td>
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<tr>
<td>Food Chemistry and Analysis</td>
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<tr>
<td>- Organic Chemistry</td>
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<tr>
<td>- Industrial Organic Chemistry Elective II</td>
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<tr>
<td>Spectroscopy and Properties of Organic Compounds</td>
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<tr>
<td>Chemical Laboratory I</td>
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<td>Chemical Laboratory II</td>
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<td>Chemical Laboratory III</td>
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<td>Chemical Laboratory IV</td>
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<tr>
<td>Chemical Laboratory V</td>
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<tr>
<td>Physical Chemistry</td>
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<tr>
<td>Organic Chemistry</td>
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<tr>
<td>Inorganic Chemistry</td>
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<tr>
<td>Analytical Chemistry</td>
<td></td>
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<tr>
<td>Properties of Matter and Chemical Energetics</td>
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<tr>
<td>Chemistry of Elements and Organic Compounds</td>
<td></td>
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<tr>
<td>Kinetics, Mechanism and Stereochemistry</td>
<td></td>
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<tr>
<td>Thermodynamics and Electrochemistry</td>
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<tr>
<td>Spectroscopy and Properties of Organic Compounds</td>
<td></td>
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<tr>
<td>- Chemical Laboratory Management</td>
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<tr>
<td>- Chemical Safety and Security</td>
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<tr>
<td>- Solid State Chemistry</td>
<td></td>
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<tr>
<td>Instrumental Methods of Chemical Analysis</td>
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</tr>
</tbody>
</table>

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

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## Bachelor of Science (Honours) in Analytical Chemistry

**3 years**

**PROGRAMME OVERVIEW**

Analytical chemistry is the study of the separation, identification and quantification of the chemical components of natural and artificial materials. Qualitative analysis gives an indication of the identity of the chemical species in the sample and quantitative analysis determines the amount of one or more of these components. Analytical chemistry focuses on improvements in experimental design, chemometrics and the creation of new measurement tools to provide better chemical information. Analytical chemistry is applied in forensics, environmental analysis, materials analysis, drugs analysis, food analysis, bioanalysis, and clinical analysis. As a scientific field of great diversity in its application, students trained in this programme will be in great demand in the chemical related industries.

This programme provides students with a thorough background in analytical chemistry with a strong emphasis on instrumentation and the development of variety of important analytical skills. This programme focuses on giving hands-on experience to students on some of the major analytical techniques for analysing samples from a wide range of sources and equips graduates with a broad solid foundation in Chemistry.

It is also designed to meet industries’ need for capable, dynamic and innovative graduates with well-developed technical skills and a sound theoretical knowledge in analytical chemistry.

This programme is endorsed by Institut Kimia Malaysia (IKM). Graduates of this programme can join IKM as a member and can be recognised as a ‘Registered Chemist’ in Malaysia.

**CAREER PROSPECTS**

- Research Scientists
- Analytical Chemists in commercial laboratories
- Quality Control/Assurance Chemists
- Laboratory Supervisors
- Product Chemists (Analytical Instrumentation)
- Occupational Health and Safety Specialists
- Environmental Impact Assessment (EIA) Officers
- Product Development Chemists (pharmaceutical area, food industry, cosmetic industry, polymer industry, etc)
- Product Specialists

**PROGRAMME OUTLINE (TOTAL CREDITS: 125)**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Chemical Laboratory I</td>
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<td>Chemical Laboratory II</td>
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<td>Chemical Laboratory III</td>
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<td>Environmental Chemistry and Analysis</td>
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<td>Environmental Pollution</td>
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<td>Control</td>
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<td>QA and QC in Good Laboratory</td>
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<tr>
<td>Practices</td>
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<tr>
<td>Project</td>
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<tr>
<td>Industrial Training or 2 elective courses</td>
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<tr>
<td>Elective I</td>
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<td>Elective II</td>
<td></td>
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<tr>
<td>Elective Courses (Choose 2)</td>
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<tr>
<td>- Chemical Safety and Security</td>
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<tr>
<td>- Solid State Chemistry</td>
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<tr>
<td>- Cosmetic Chemistry</td>
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<tr>
<td>- Medicinal Chemistry</td>
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<tr>
<td>- Organometallic Chemistry</td>
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</tr>
<tr>
<td>- Occupational Safety &amp; Health</td>
<td>0</td>
</tr>
<tr>
<td>- Surface and Colloid Chemistry</td>
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</tr>
<tr>
<td>- Industrial Organic Chemistry</td>
<td>0</td>
</tr>
</tbody>
</table>

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

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*Note: General College Curriculum and Liberal Arts requirements must be fulfilled for Campbell University BS Degree programme*
Bachelor of Science (Honours) in Management Mathematics with Computing 3 years

PROGRAMME OVERVIEW
This programme is a multi-disciplinary blend with Management Mathematics as the major, Computing as minor and Business Management as associated study. Management Mathematics covers mathematical techniques for business management, including resource allocation and planning, optimisation, project management, quantitative decision, applied statistics, quality control and financial mathematics. Computing courses prepare students for software design and development including skills on programming and information management.

This programme also prepares graduates to branch into other disciplines for further academic pursuit such as master in business management, statistics, and information technology.

It also lays the foundation for graduates to achieve further professional qualifications in actuary, financial planning, financial analysis and risk management.

CAREER PROSPECTS
Officers in financial institutions such as banks, insurance firms, and investment houses, Quantitative Analysts, Quality Managers, Research Officers, Investment Analysts, Financial Analysts, Management Consultants, Financial Planners and Advisors, Pricing Analysts, Market Risk Managers, Credit Risk Managers, Asset/Liability Managers, IT Managers, Programmers, Teachers.

PROGRAMME OUTLINE (TOTAL CREDITS: 122)

- Discrete Mathematics
- Calculus I
- Calculus II
- Algebra
- Probability and Statistics
- Linear Algebra
- Advanced Calculus
- Numerical Methods
- Mathematical Statistics
- Applied Statistics
- Operations Research I
- Operations Research II
- Financial Mathematics
- Quality Control
- Mathematical & Statistical
- Software
- Problem Solving and Programming
- Database Management
- Computer Organisation and Architecture
- Object-Oriented Programming
- Operating Systems
- IT Fundamentals
- Visual Programming
- Industrial Training
- Project

Electives
- Discrete Mathematics
- Calculus
- Algebra
- Probability and Statistics
- Linear Algebra
- Advanced Calculus
- Numerical Methods
- Mathematical Statistics
- Applied Statistics
- Operations Research
- Financial Mathematics
- Quality Control
- Mathematical & Statistical
- Software
- Problem Solving and Programming
- Database Management
- Computer Organisation and Architecture
- Object-Oriented Programming
- Operating Systems
- IT Fundamentals
- Visual Programming
- Industrial Training
- Project

Bachelor of Computer Science (Honours) in Interactive Software Technology 3 years

PROGRAMME OVERVIEW
This programme aims to teach students the technical knowledge and skills in computer science with a further focus on the design and development of interactive software that can be used in mobile applications, video games, flight simulators, virtual reality, electronic magazines, educational and training materials. Business organisations use interactive advertisements, job-training applications and skills-training applications. Educators use interactive media to deliver classroom presentations that enhance students learning. Students use interactive multimedia applications to learn by reading, seeing, hearing and interacting with the subject content. Interactive content is always present in computer games and other types of entertainment that uses multimedia applications.

Electives courses like Advanced Computer Game Programming, Digital Illustration, Computer Game Design, Virtual Reality, 3D Animation and 3D Game Development will be offered to students undergoing this programme.

CAREER PROSPECTS
- Games Designers
- Games Programmers
- Games Software Engineers
- Games Producers
- Games Testers
- Technical Lead
- Web Designers
- Multimedia Developers
- Software Developers
- Mobile Application Developers
- Systems Analysts

PROGRAMME OUTLINE (TOTAL CREDITS: 125)

- Problem Solving and Programming
- Computer Game Studies
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Object-Oriented Analysis and Design
- Data Structures and Algorithms
- Operating Systems
- Software Engineering
- Graphics Programming
- Computer Game Programming
- Social and Professional Issues
- Artificial Intelligence
- IT Fundamentals
- Web Design and Development
- Multimedia Development for the Web
- Fundamentals of Computer Networks
- Mobile Application Development
- Human Computer Interaction
- Discrete Mathematics
- Probability and Statistics
- Mathematics for Games Technology
- Project I
- Project II
- Industrial Training (6 months)

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

Electives (Choose 4)
- Virtual Reality
- Computer Game Design
- Advanced Computer Game Programming
- 3D Game Development
- Advanced Graphics Programming
- Digital Illustration
- 3D Animation
- Introduction to the Short Story
- Music Appreciation
- Computer Games Technology

Language, Mata Pelajaran Pengajian Umum (MPU) and Co-curricular Courses:

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular
Bachelor of Computer Science (Honours) in Software Engineering
3 years

PROGRAMME OVERVIEW
Graduates of this programme will be able to develop, manage and maintain high-quality software in a systematic, controlled and efficient manner. In addition to fundamentals of computing, students will develop their specialisation by going through some of the following courses: Systems Analysis and Design, Software Engineering, Software Requirements Engineering, Software Design and Architecture, Formal Methods for Software Engineering, Software Quality and Testing, Software Evolution and Maintenance and Software Project Management.

Electives courses like Introduction to Computer Security, Advanced Database Management, Mobile Application Development, Web Application Development, Distributed Computer Systems, Data Science and Cloud Computing will be offered to students undergoing this programme.

Students will have an opportunity to work with industry through their 6 months industrial training and carry out real-life projects on software engineering. All such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- Software Engineers
- Software Testers
- Software Quality Assurance Engineers
- Software Developers
- Software Architects
- Systems Analysts
- Web Developers
- Mobile Application Developers
- IT Consultants
- IT Managers

PROGRAMME OUTLINE (TOTAL CREDITS: 123)
- Problem Solving and Programming
- Database Management
- Introduction to Computer Systems
- Object-Oriented Programming
- Research Methods
- Data Structures and Algorithms
- Software Engineering
- Social and Professional Issues
- Artificial Intelligence
- Software Quality Assurance and Testing
- Software Requirements Engineering
- Software Design and Architecture
- Software Project Management
- Modelling and Simulation
- Formal Methods for Software Engineering
- Software Evolution and Maintenance
- Graphic Programming
- Systems Analysis and Design
- Introduction to Computer Networks
- Web Development
- Human Computer Interaction
- Probability and Statistics
- Discrete Mathematics
- Further Discrete Mathematics
- Project I
- Project II
- Industrial Training (6 months)

Electives (Choose 4)
- Distributed Computer Systems
- Advanced Database Management
- Web Application Development
- Introduction to Computer Security
- Mobile Application Development
- Data Science
- Cloud Computing
- Introduction to the Short Story
- Music Appreciation

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

Note: General College Curriculum and Liberal Arts requirements must be fulfilled for Campbell University BS Degree programme.

Bachelor of Information Systems (Honours) in Enterprise Information Systems
3 years

PROGRAMME OVERVIEW
Information systems are the heart of many organisations that support their daily business processes and in turn promote business growth. As the size and demand of information systems has grown tremendously, many of the business functions like sales & marketing, finance & accounting, manufacturing & processes, human resources, supply chain management, customer relationship management, knowledge management and many other business functions are integrated into enterprise information systems to further improve organisational performance.

This programme is designed to equip students with the ability to solve practical problems in the implementation of enterprise information systems in large organisations. In addition to fundamentals of computing, the specialisation subject area covers Business and Information Systems, Systems Analysis and Design, Enterprise Systems, Enterprise Resource Planning, Data Warehouse Technology, Business Intelligence, Business Process Management, Information Systems Implementation and Principles of Accounting.

Electives courses like Introduction to Computer Security, Visual Programming, Software Project Management, Decision Support Systems, Advanced Database Management, Electronic Commerce, Database Administration and IS Strategy and Management will be offered to students undergoing this programme.

Students will have an opportunity to work with the industry through their 6 months of industrial training and carry out real-life projects on software development, implementation of enterprise information systems and data analysis. All such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- ERP Consultants
- Business and Systems Analysts
- Business Process Consultants
- Business Intelligence Specialists
- Data Warehouse Developers
- IT Consultants
- IT & Project Managers
- Programmers
- Web Designers
- Database Administrators

PROGRAMME OUTLINE (TOTAL CREDITS: 122)
- Business and Information Systems
- Problem Solving and Programming
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Object-Oriented Analysis and Design
- Data Structures and Algorithms
- Operating Systems
- Enterprise Resource Planning
- Information Systems Implementation
- Social and Professional Issues
- IT Fundamentals
- Web Design and Development
- Systems Analysis and Design
- Enterprise Systems
- Fundamentals of Computer Networks

Electives (Choose 4)
- Advanced Database Management
- Introduction to Computer Security
- Visual Programming
- IS Strategy and Management
- Database Administration
- Software Project Management
- Decision Support Systems
- Introduction to the Short Story
- Music Appreciation
- Principles of Accounting

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular
Bachelor of Information Technology (Honours) in Software Systems Development 3 years

PROGRAMME OVERVIEW
This programme is to produce and equip graduates with in-depth knowledge and skills that are essential to work as professionals in the software systems development and computer networking sectors. In addition to fundamentals of computing, topics of specialisation covered are Systems Analysis and Design, Visual Programming, Web Application Development, Software Engineering, Agile Software Development, Software Project Management, Human Computer Interaction and Computer Networking.

Students graduating from this programme will be capable of developing software systems in various platforms to fulfill the needs and requirements from organisations using appropriate software engineering methodologies and software project management techniques. In addition, students will also be able to design, configure, set up and maintain computer networks in organisations.


Students will have an opportunity to work with the industry through their 6 months of industrial training and carry out real-life projects in software systems development, network communications or database management. All such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- Programmers
- Web Developers
- Multimedia Developers
- Mobile Application Developers
- Systems Analysts
- Software Engineers
- Database Administrators
- Network Engineers
- IT Consultants
- IT Managers

PROGRAMME OUTLINE (TOTAL CREDITS: 123)
- IT Fundamentals
- Web Design and Development
- Systems Analysis and Design
- Visual Programming
- Fundamentals of Computer Networks
- Human Computer Interaction
- Web Application Development
- Computer Networks
- Advanced Computer Networks
- Software Project Management
- Agile Software Development
- Problem Solving and Programming
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Object-Oriented Analysis and Design
- Data Structures and Algorithms
- Operating Systems
- Software Engineering
- Social and Professional Issues
- Probability and Statistics
- Discrete Mathematics
- Project I
- Project II
- Industrial Training (6 months) Electives (Choose 4)
  - Introduction to Computer Security
  - Digital Multimedia
  - Mobile Application Development
  - Network Security
  - Systems Administration
  - Integrative Programming
  - Cloud Computing
  - Advanced Database Management
  - Software Quality Assurance and Testing
  - Principles of Accounting
  - Music Appreciation

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
- English Language
- Tamadun Islam dan Asia
- English for Communication
- Hubungan Etnik
- English for the Profession
- Entrepreneurship
- Bahasa Kebangsaan A
- Contemporary Malaysian Issues
- Co-curricular

Bachelor of Information Technology (Honours) in Internet Technology 3 years

PROGRAMME OVERVIEW
The growth and development of the Internet is rapid and innovative. This phenomenon has enabled many companies to use web-based systems to operate their business processes in more efficient, effective and innovative ways. Use of the internet has also led companies to be competitive.

This programme produces graduates who have the in-depth knowledge and skills that are essential to work as professionals in the web development, mobile development, web-based multimedia development and computer networking sectors. Graduates will also be equipped with knowledge and skills in Enterprise Web Applications, Web Engineering, Web Services and Internet Security.


Students will have an opportunity to work with the industry through their 6 months of industrial training and carry out real-life projects in software development and computer networking. All such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- Web Developers
- Multimedia Developers
- Mobile Application Developers
- Systems Analysts
- Network Engineers
- IT Consultants
- IT Managers

PROGRAMME OUTLINE (TOTAL CREDITS: 123)
- IT Fundamentals
- Web Design and Development
- Systems Analysis and Design
- Visual Programming
- Fundamentals of Computer Networks
- Human Computer Interaction
- Web Application Development
- Computer Networks
- Advanced Computer Networks
- Software Project Management
- Agile Software Development
- Problem Solving and Programming
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Object-Oriented Analysis and Design
- Data Structures and Algorithms
- Operating Systems
- Advanced Computer Networks
- Web Engineering
- Enterprise Web Applications
- Advanced Web Networks
- Web Services
- Problem Solving and Programming
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Electronic Commerce
- Human Computer Interaction
- Mobile Computing
- Network Security
- Emerging Web Technologies
- Advanced Mobile Computing
- Cloud Computing
- Advanced Database Management
- Music Appreciation

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
- English Language
- Tamadun Islam dan Asia
- English for Communication
- Hubungan Etnik
- English for the Profession
- Entrepreneurship
- Bahasa Kebangsaan A
- Contemporary Malaysian Issues
- Co-curricular

Note: General College Curriculum and Liberal Arts requirements must be fulfilled for Campbell University BS Degree programme
Bachelor of Information Technology (Honours) in Information Security
3 years

PROGRAMME OVERVIEW
This programme is designed to equip students with technical abilities and knowledge of the information security in the areas of Computer Security, Internet Security, Information Assurance and Security, Network Security, Operating Systems Security and Software Security. In addition, students have the opportunity to learn about computer networking and software development. Students will learn and be trained on how to detect, prevent and defend organisations' systems from unauthorised access. Effective back up and recovery are important skills in this programme. Students are exposed to various security software.

Electives courses like Digital Forensics, Mobile Computing, Vulnerability Assessment and Penetration Testing, Security Assessment and Risk Management, Network Forensics, Systems Administration and Cloud Computing will be offered to students undergoing this programme.

Students will have an opportunity to work with the industry through their 6 months of industrial training and carry out real-life projects in information security. All such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
• Information Security Analysts
• Information Security Consultants
• Information Security Managers
• Information Security Engineers
• Information Security Administrators
• Information Security Auditors

CAREER PROSPECTS
• Forensics Analysts
• Forensics Investigators
• Security Software Developers
• Web Developers
• Mobile Application Developers
• Network Security Engineers

PROGRAMME OUTLINE (TOTAL CREDITS: 123)
- IT Fundamentals
- Web Design and Development
- Introduction to Computer Security
- Internet Security
- Fundamentals of Computer Networks
- Information Assurance and Security
- Web Application Development
- Computer Networks
- Software Security
- Operating Systems Security
- Network Security
- Advanced Computer Networks
- Problem Solving and Programming
- Database Management
- Computer Organization and Architecture
- Object-Oriented Programming
- Research Methods
- Object-Oriented Analysis and Design
- Data Structures and Algorithms
- Operating Systems
- Social and Professional Issues
- Probability and Statistics
- Discrete Mathematics
- Project I
- Project II
- Industrial Training (6 months)
Electives (Choose 4)
- Digital Forensics
- Mobile Computing
- Vulnerability Assessment and Penetration Testing
- Security Assessment and Risk Management
- Network Forensics
- Advanced Mobile Computing
- Systems Administration
- Cloud Computing
- Music Appreciation

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

Bachelor of Science (Honours) in Applied Physics (Instrumentation)
3 years

PROGRAMME OVERVIEW
This programme equips students with the knowledge in physics and instrumentations, and operational technical skill, which would lay the foundation for applications in various industrial areas. Students will go through training in the applications of physics and instrumentations, computer simulations, designing virtual instruments using Labview and handling advanced equipment such as thermal evaporator and atomic force microscope. This programme would lay the foundation for future applied physics innovators in material sciences, instrumentations, biomedical and healthcare equipment designers.

Academically, this programme has adequate coverage in its core physics contents, and graduates are well prepared to continue their post-graduate studies in physics, locally or overseas. Additionally, they can also pursue post-graduate studies in cross-disciplinary fields such as nanoscience, biophysics, chemical physics, medical physics, and geophysics.

CAREER PROSPECTS
• Research and Development Personnel
• Semiconductor Test Engineers
• Semiconductor Design Engineers

CAREER PROSPECTS
• Instrumentation Engineers
• Biomedical Devices Engineers

PROGRAMME OUTLINE (TOTAL CREDITS: 122)
- Electricity and Magnetism
- Physics Laboratory
- Physics II
- Thermodynamics
- Thermodynamics Laboratory
- Classical Mechanics and Special Relativity
- Electromagnetism
- Electromagnetism Laboratory
- Quantum Mechanics
- Solid State Physics
- Solid State Physics Laboratory
- Optics
- Optics Laboratory
- Physics of Semiconductor Devices
- Circuit Theory
- Electronics
- Electronics Laboratory
- Introduction to Microcontrollers
- Programming Concepts
- Virtual Instrumentation
- Control Principles for Instrumentation
- Scientific Instrumentation
- Sensors and Actuators
- Algebra and Calculus
- Mathematics for Science I
- Mathematics for Science II
- Public Speaking
- Project
- Industrial training (3 months)
Elective I (Choose 1)
- Materials Science I
- Computational Methods in Physics
- Independent Study
- Mathematics for Science III
Elective II (Choose 1)
- Applied Electromagnetism
- Photonics and Laser Physics
- Materials Science II
- Energy Science
Optional Electives
(can be taken in any semester)
- Introduction to Short Story
- Music Appreciation

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

Note: General College Curriculum and Liberal Arts requirements must be fulfilled for Campbell University BS Degree programme.
Bachelor of Science (Honours) in Microelectronics (Embedded Technology) 3 years

PROGRAMME OVERVIEW

This programme educates and trains knowledgeable personnel to join the nation’s workforce with the direct focus to make Malaysia an innovative high-income society. Students will be trained for careers in semiconductors, IC design, embedded systems and computing which are important knowledge/skills to support the electrical & electronics sectors.

The curriculum of this programme has been designed to meet the demands of the Malaysian Economic Transformation Programme (ETP). Students are trained in analogue and digital electronics, application specific IC (ASIC), field programmable array (FPGA) and IC design using current professional tools. These knowledge and skills will be important to meet the demand of fabless design firms under the ETP. To complement the microelectronics content of the programme, students are also trained in embedded systems design using current microcontrollers (ARM/PIC) as well as real time operating systems (RTOS) with emphasis on efficient programming techniques.

Graduates will be sought after by design houses/companies in IC design and fabrication, automation, robotics, identification and monitoring, test and measurement, and consumer electronics.

CAREER PROSPECTS

• Research & Development Engineers
• Microelectronic Engineers
• Firmware Engineers

• Embedded Systems Design Engineers
• IC Design Engineers

PROGRAMME OUTLINE (TOTAL CREDITS: 123)

• Circuit Theory
• Analogue Electronics I
• Analogue Electronics II
• Digital Logic Principles
• Digital System Design
• Introduction to IC Layout and Fabrication
• ASIC and FPGA Design
• Integrated Circuit Design
• Semiconductors Devices
• Electromagnetics
• Control Systems
• Digital Signal Processing
• Introduction to Microcontrollers
• Microcontroller Peripherals
• Programming Concepts
• C Language Programming for Microcontrollers
• Test Driven Development
• Algorithms & Data Structure
• RTOS for Embedded Systems
• Agile Software Development
• Algebra and Calculus
• Mathematics for Science I
• Mathematics for Science II
• Public Speaking
• Project
• Industrial training (3 months)
  Elective I (Choose 1):
  • Data Communication (TCP/IP)
  • Power Electronics
  • Virtual Instrumentation
  • Object-Oriented Programming
  • Basic Biomechanics
• Principles of Coaching
• Basic Biomechanics
• Sport Injuries and Prevention
• Motor Control and Learning
• Sport Nutrition
• Exercise and Rehabilitation
• Applied Sport Nutrition
• Sport Coaching
• Performance assessment for Sport
• Clinical Exercise Testing
• Health, Fitness and Disease
• Behavior Modification in Sport & Exercise

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular

Bachelor of Science (Honours) in Sports and Exercise Science 3 years

PROGRAMME OVERVIEW

The skills gained from a degree in sports and exercise science could certainly fire the starting gun for an interesting and rewarding career. Students equipped with a good knowledge of the sports and exercise science enable them to look at the science behind health and fitness, as well as an insight into related areas such as nutrition, psychology and management. Demand is growing for sports scientists and performance consultants, as society in general develops a greater awareness of health and fitness issues around work.

This programme provides the students an opportunity to work with industry through their internship and to carry out a real-life research project on sports and exercise science. All such training will add value to their qualification and later to their employment opportunities.

CAREER PROSPECTS

• Health & Fitness Industry
• Fitness Coaching
• Sport Administrators
• Health & Lifestyle Consultancy and Management
• Physical Education Lecturers
• Event Managers
• Sales Managers
• Senior Executive Officers
• Student Liaison Officers
• Sports Development Officers

• Sports Officers/Administrators
• Sports Facilities Maintenance Personnel
• Public Relations Personnel
• Personnel Trainers
• Fitness Trainers/Advisors
• Fitness/Gym Instructors
• Fitness Sales Consultants
• Sales/Marketing Executives
• Management Executives

PROGRAMME OUTLINE (TOTAL CREDITS: 123)

• Human Anatomy and Physiology
• Introduction to Sport Science
• Foundation of Fitness and Exercise
• Sport Psychology
• Principles of Coaching
• Basic Biomechanics
• Health, Fitness and Disease
• Clinical Exercise Testing
• Physical Activity and Performance
• Exercise and Rehabilitation

Core Elective (Choose 6):
  • Applied Sport Nutrition
  • Exercise and Rehabilitation
  • Sport Coaching
  • Performance assessment for Sport
  • Clinical Exercise Testing
  • Health, Fitness and Disease
  • Behavior Modification in Sport & Exercise

Games Elective (Choose 4):
  • Games I: Gym Workout and Swimming
  • Games II: Tennis and Gymnastics
  • Games III: Track & Field
  • Games IV: Basketball and Badminton
  • Games V: Golf and Squash
  • Games VI: Fencing
  • Games VII: Advanced Gymnastics

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, Tamadun Islam dan Asia, English for Communication, Hubungan Etnik, English for the Profession, Entrepreneurship, Bahasa Kebangsaan A, Contemporary Malaysian Issues, Co-curricular
PROGRAMME OVERVIEW

This programme applies the pure science subjects, such as chemistry, biochemistry, nutrition, biology and microbiology to the study of the nature, properties and composition of foods. It also covers the changes which they undergo during storage and processing including transformation into safe and quality food products for consumers. Graduates will be given exposures to areas in functional foods leading to healthy and vibrant lifestyle. In addition, this programme prepares graduates with advanced laboratory skills and current techniques in food science including those related to safety practices and standards, leading to the professionalism in the area of food science.

Graduates of this programme, therefore, will have developed a range of skills which will enable them to occupy production and managerial positions in food and food-related industries, consulting laboratories, government organisations and regulatory bodies. This programme also aims to prepare technically competent graduates to venture into entrepreneurship and new product developments in food industry.

CAREER PROSPECTS

- Food Researchers
- Quality Control/Assurance Executives
- Application Food Technologists
- Food Product Development Personnel
- Marketing & Sales Executives
- Food Technologists
- Food Chemists
- Nutrition Executives
- Food Services Executives
- Food Microbiologists
- Food Product Advisors/Specialists
- Industrial/Retail Buyers

PROGRAMME OUTLINE (TOTAL CREDITS: 126)

- Introduction to Food Science
- Food Chemistry I
- Food Chemistry II
- Food Analysis
- Food Physics
- Microbiology
- Food Microbiology I
- Food Microbiology II
- Unit Operations in Food Processing
- Food Processing Technology
- Food Biotechnology
- Sensory Evaluation
- Food Quality Assurance and Food Safety
- Food Product Development
- Food Preservation
- Food Fermentation
- Human Nutrition
- Nutritional Assessment
- Fundamental Biology and Biochemistry
- Metabolic Biochemistry
- Fundamentals of Molecular Biology
- General Chemistry I (Physical + Analytical Chemistry)
- General Chemistry II (Organic + Inorganic Chemistry)
- Instrumental Methods of Food Analysis
- Calculus and Algebra
- Statistical Methods for Scientific Analysis
- Project
- Industrial Training

Elective I (Choose 1)
- Nutrition and Health
- Sport Nutrition I
- Applied Statistics
- Contemporary Issues in Health and Nutrition

Elective II (Choose 1)
- Therapeutic Nutrition
- Food Toxicology
- Nutritional Immunology
- Sport Nutrition II

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

- English Language
- Tamadun Islam dan Asia
- English for Communication
- Hubungan Etnik
- English for the Profession
- Entrepreneurship
- Bahasa Kebangsaan A
- Contemporary Malaysian Issues
- Co-curricular

Note: General College Curriculum and Liberal Arts requirements must be fulfilled for Campbell University BS Degree programme.
**Diploma in Science (Chemistry and Biology)** 2 years

**PROGRAMME OVERVIEW**
This programme aims to produce chemistry and biology graduates at the sub-professional level. It equips students with the necessary basic knowledge of scientific concepts and theoretical principles to understand chemical and biological phenomena and processes, and trains students to perform standard chemical and biological laboratory procedures. This programme covers both the practical and theoretical aspects of the subjects. The chemistry syllabi provide a detailed coverage of various topics including atomic and molecular structures, properties of matter, properties and reactions of elements and compounds, analytical techniques and industrial products. The biology syllabi cover a broad spectrum of topics which include cells, energetics, homeostasis and excretion, reproduction and development, biodiversity, ecology, and microbiology. This programme largely emphasises the application of chemical principles in control of the living environment.

**CAREER PROSPECTS**
Quality controllers, technical assistants and laboratory supervisors in manufacturing industries or medical establishments.

**ACADEMIC PROGRESSION**
Graduates may be admitted into Year 2 of:-
- Bachelor of Science (Honours) in Bioscience with Chemistry
- Bachelor of Science (Honours) in Analytical Chemistry

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**
- Physical Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Analytical Chemistry
- Chemistry and Society
- Chemical Structure and Energetics
- Properties of Matter
- Chemistry of Elements and Organic Compounds
- Cells and Their Organisation
- Bioenergetics
- Homeostasis and Excretion
- Response and Coordination
- Reproduction and Development
- Biodiversity and Ecology
- Structural Biochemistry
- Microbiology
- Forensic Chemistry and Biology
- Pre-Calculus
- Introductory Calculus
- Calculus
- Algebra
- Statistics and Operations Research
- Information Systems and Application
- Business Organisation and Management

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**
- English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

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**Diploma in Science (Computer Science and Statistics)** 2 years

**PROGRAMME OVERVIEW**
This programme emphasises on the analysis, development and implementation of computer systems and also focuses on developing statistical theory, inference methods and statistical modelling.

**CAREER PROSPECTS**
Programmers
- End-user Support Staff
- Analysts/Programmers
- IT Administrators or Executives, Systems Officers
- Database Administrators
- Web Designers
- Quality Control Officers
- Market Research Executives

**ACADEMIC PROGRESSION**
Graduates may be admitted into Year 2 of:-
- Bachelor of Science (Honours) in Management Mathematics with Computing
- Bachelor of Information Systems (Honours) in Enterprise Information Systems

**PROGRAMME OUTLINE (TOTAL CREDITS: 95)**
- Information Technology
- Programming Concepts and Design I
- Programming Concepts and Design II
- Principles of Information Systems
- Web Design and Development
- Analysis and Design of IS
- Analysis and Design of IS Case Study
- Object-Oriented Programming Techniques
- Windows Application Programming
- Database Development and Applications
- Business Organisation and Management
- Analytic Trigonometry
- Introductory Mathematical Modelling
- Introductory Calculus
- Statistics I
- Statistics II
- Calculus I
- Calculus II
- Discrete Mathematics
- Algebra
- Introduction to Survey Research Methodology
- Statistical Software Applications
- Microeconomics
- Macroeconomics

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**
- English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
Diploma in Science (Computer Science and Management Mathematics) 2 years

PROGRAMME OVERVIEW

Emphasis is on analysis, development and implementation of computer systems, as well as mathematical techniques for financial and managerial applications.

CAREER PROSPECTS

• Programmers
• End-user Support Staff
• Assistant System Analysts
• IT Administrators or Executives
• Systems Officers
• Database Administrators
• Web Designers

ACADEMIC PROGRESSION

Graduates may be admitted into Year 2 of:-
• Bachelor of Science (Honours) in Management Mathematics with Computing
• Bachelor of Information Technology (Honours) in Software Systems Development

PROGRAMME OUTLINE (TOTAL CREDITS: 93)

• Information Technology
• Programming Concepts and Design I
• Programming Concepts and Design II
• Principles of Information Systems
• Web Design and Development
• Analysis and Design of IS
• Analysis and Design of IS Case Study
• Object-Oriented Programming Techniques
• Windows Application Programming
• Database Development and Applications

• Basic Mathematics I
• Basic Mathematics II
• Basic Algebra
• Basic Calculus
• Statistics I
• Statistics II
• Calculus I
• Calculus II
• Discrete Mathematics
• Algebra
• Mathematics for Management
• Accounting Methods I
• Accounting Methods II

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

Diploma in Science (Computer Science and Computer Mathematics) 2 years

PROGRAMME OVERVIEW

Students are trained in both theoretical knowledge and practical skills for software development, system design and related mathematical techniques.

CAREER PROSPECTS

• Programmers
• Database Administrators
• Technical Officers

ACADEMIC PROGRESSION

Graduates may be admitted into Year 2 of:-
• Bachelor of Science (Honours) in Management Mathematics with Computing
• Bachelor of Computer Science (Honours) in Software Engineering

PROGRAMME OUTLINE (TOTAL CREDITS: 95)

• Information Technology
• Programming Concepts and Design I
• Programming Concepts and Design II
• Principles of Information Systems
• Web Design and Development
• Analysis and Design of IS
• Analysis and Design of IS Case Study
• Object-Oriented Programming Techniques
• Computer Systems Architecture
• Fundamentals of Computer Networks

• Database Development and Applications
• GUI and Web Application Programming
• Pre-Calculus
• Introductory Calculus
• Statistics I
• Statistics II
• Calculus I
• Calculus II
• Discrete Mathematics
• Algebra
• Accounting Methods I
• Accounting Methods II
• Business Organisation and Management

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
**Diploma in Interactive Software Technology**

**2 years**

**PROGRAMME OVERVIEW**

This programme equips students with the fundamental knowledge and practical skills in interactive software technology. Students will acquire knowledge and practical skills in the C++ language, XHTML, DirectX, assembly language, and the development of 2D games. This programme focuses on training students in the development of interactive software, particularly in the areas of game development, education software development, as well as programming and web development.

**CAREER PROSPECTS**

Graduates can seek employment at a semi-professional level in companies involved in the areas of game development, educational software development, as well as programming and web development.

**PROGRAMME OUTLINE (TOTAL CREDITS: 91)**

- Information Technology
- Programming Concepts and Design I
- Programming Concepts and Design II
- Games Technology
- Computer Game Studies
- Web Development
- Computer Game Development
- Electronic Commerce
- Computer Game Programming
- Analysis and Design of IS
- Analysis and Design of IS Case Study
- Object-Oriented Programming in C++
- Database Development and Applications
- Computer Systems Architecture
- 2D Game Development Workshop
- Pre-Calculus
- Calculus and Algebra
- Probability and Statistics
- Mathematics for Games Technology I
- Mathematics for Games Technology II
- Behavioural Science
- Business Organisation and Management

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

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**Diploma in Science (Business Information Systems)**

**2 years**

**PROGRAMME OVERVIEW**

This programme is an applied computer science programme which majors in computer science with business information systems. It aims to produce graduates with fundamental knowledge in information technology and its business related applications. It covers the theoretical and practical aspects of developing information systems, management, costing, accounting, electronic commerce, and mathematics. This programme is supported by case studies and computer laboratory assignments. In addition, students are exposed to part of the SAP curriculum like logistics and enterprise resource planning. Students will acquire practical skills in the C Language, XHTML, JavaScript, VB.NET, Microsoft Expression Web, Microsoft SQL Server, accounting software packages and be guided through the process of developing an information system.

**CAREER PROSPECTS**

Graduates may seek employment at a semi-professional level in companies involved in the areas of game development, educational software development, as well as programming and web development.

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**

- Information Technology
- Programming Concepts and Design I
- Programming Concepts and Design II
- Principles of Information Systems
- Web Design and Development
- Windows Application Programming
- Analysis and Design of IS
- Analysis and Design of IS Case Study
- Object-Oriented Programming in C++
- Database Development and Applications
- Computer Systems Architecture
- 2D Game Development Workshop
- Pre-Calculus
- Calculus and Algebra
- Probability and Statistics
- Mathematics for Games Technology I
- Mathematics for Games Technology II
- Behavioural Science
- Business Organisation and Management
- Electronic Commerce
- Information Systems Development
- Fundamental Mathematics
- Introductory Statistics
- Management Mathematics
- Introduction to Logistics Operations
- Enterprise Resource Planning
- Business Organisation and Management
- Accounting Methods I
- Accounting Methods II
- Cost Accounting
- Accounting Software Packages

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
Programmes Offered

**Diploma in Science (Information Systems Engineering) 2 years**

**PROGRAMME OVERVIEW**
This programme provides students with a basic understanding of computing techniques and aims to develop the computing and information technology-based knowledge and skills required in modern industrial, commercial and service organisations. It will equip students with essential knowledge of the underlying principles of modern computing technology and enable students to appreciate how modern computers are applied to a range of real world problems. Students will learn C, Java, Assembly Language, Microsoft SQL Server, Adobe Flash, XHTML, CSS, Microsoft Expression Web and Java Script. Upon completion, graduates will have acquired knowledge and developed skills in the areas of computer programming, systems analysis, operating systems, computer networking, computer applications and object-oriented software development, as well as in generic business courses. The foundation in operating systems and fundamentals of computer networks would prepare students to go through the Cisco Certified Network Associate (CCNA) and Novell Certified Linux Professional (NCLP) training offered at the Bachelor Degree level.

**CAREER PROSPECTS**
- Junior Programmers
- End-user Support Staff
- Junior Systems Analysts
- EDP Executives
- Assistant Database Administrators
- IT Executives

**ACADEMIC PROGRESSION**
Graduates may be admitted into Year 2 of Bachelor of Information Technology (Honours) in Software Systems Development.

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**
- Information Technology
- Programming Concepts and Design I
- Programming Concepts and Design II
- Principles of Information Systems
- Web Design and Development
- Analysis and Design of IS
- Analysis and Design of IS Case Study
- Object-Oriented Programming Techniques
- Operating Systems
- Computer Systems Architecture
- Fundamentals of Computer Networks
- Database Development and Applications
- Managing Information Systems
- GUI and Web Application Programming
- Information Systems Development
- Pre-Calculus
- Calculus and Algebra
- Probability and Statistics
- Discrete Mathematical Structures I
- Discrete Mathematical Structures II
- Introduction to Business
- Introduction to Marketing
- Business Organisation and Management

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

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**Diploma in Science (Internet Technology) 2 years**

**PROGRAMME OVERVIEW**
This programme aims to equip students with Internet-related knowledge and skills. Students are trained in the areas of computer, Internet and World Wide Web technology. This programme also provides a strong element of Internet design and programming in order for the students to obtain the essential skills required for effective commercial use of networks. Students in this programme will learn ASP.NET, JavaScript, XHTML, C, Web Programming using Adobe Dreamweaver, web-based multimedia applications using Adobe Flash, database using Microsoft SQL Server and other supporting courses.

**CAREER PROSPECTS**
- Junior Web Programmers
- Junior Multimedia Developers
- Web Application Developers
- Programmers
- Internet Application Developers

**ACADEMIC PROGRESSION**
Graduates may be admitted into Year 2 of:
- Bachelor of Information Technology (Honours) in Internet Technology
- Bachelor of Information Technology (Honours) in Information Security

**PROGRAMME OUTLINE (TOTAL CREDITS: 95)**
- Information Technology
- Programming Concepts and Design I
- Programming Concepts and Design II
- Principles of Information Systems
- Analysis and Design of IS
- Analysis and Design of IS Case Study
- Object-Oriented Programming Techniques
- Operating Systems
- Database Development and Applications
- Managing Information Systems
- Fundamentals of Computer Networks
- Electronic Commerce
- Web Development
- Web-Based Multimedia Applications
- Web Systems and Technologies
- Web Application Programming
- Fundamental Mathematics
- Probability and Statistics
- Discrete Mathematical Structures I
- Discrete Mathematical Structures II
- Introduction to Business
- Behavioural Science

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
**Diploma in Science**  
*Microelectronics and Physics*  
*2 years*

**PROGRAMME OVERVIEW**  
This programme covers a wide range of topics in analogue and digital electronics, microcontrollers, programming, semiconductor devices, introduction to integrated circuit layout and physics. The programme trains students in fundamental of circuit analysis and design in electronics. It aims to develop students' analytical and logical skills as well as good hands-on skills.

**CAREER PROSPECTS**  
- Electronics Technicians  
- Embedded Systems Technicians  
- Service and Maintenance Personnel  
- Firmware Programmers

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**  
- Principles of Electric Circuits  
- Digital Logic Principles I  
- Circuits and Signals  
- Analogue Electronics I  
- Analogue Electronics II  
- Microcontrollers  
- Introduction to Integrated Circuit Layout  
- Physical Science I  
- Physical Science II  
- Physical Science III  
- Electrical Principles  
- Introduction to Semiconductor Devices and Fabrication  
- Programming Concepts  
- Software Design and Programming Techniques  
- Engineering Mathematics I  
- Engineering Mathematics II  
- Engineering Mathematics III  
- Engineering Mathematics IV  
- Engineering Mathematics V  
- Engineering Mathematics VI  
- Basic Economic Principles  
- Entrepreneurial Studies

**ACADEMIC PROGRESSION**  
Graduates may be admitted into Year 2 of:  
- Bachelor of Science (Honours) in Applied Physics (Instrumentation)  
- Bachelor of Science (Honours) in Microelectronics (Embedded Technology)

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**  
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

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**Diploma in Science**  
*Microelectronics with Computer Communications*  
*2 years*

**PROGRAMME OVERVIEW**  
This programme covers a wide range of topics in analogue and digital electronics, microcontrollers, programming, semiconductor devices, introduction to integrated circuit layout, data communication and telecommunication. The programme trains students in fundamental of circuit analysis and design in electronics, computer networking and programming. It aims to develop students' analytical and logical skills as well as good hands-on skills.

**CAREER PROSPECTS**  
- Electronics Technicians  
- Embedded Systems Technicians  
- Service and Maintenance Personnel  
- Computer Systems Support Personnel  
- Network Support Personnel  
- Firmware Programmers

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**  
- Principles of Electric Circuits  
- Digital Logic Principles I  
- Digital Logic Principles II  
- Circuits and Signals  
- Analogue Electronics  
- Data Communications and Networks  
- Telecommunications  
- Microcontrollers  
- Introduction to Integrated Circuit Layout  
- Physics I  
- Physics II  
- Introduction to Semiconductor Devices and Fabrication  
- Information Technology  
- Introduction to Programming  
- Principles of Information Systems  
- Object-Oriented Programming Techniques  
- Web Design and Development  
- Engineering Mathematics I  
- Engineering Mathematics II  
- Engineering Mathematics III  
- Engineering Mathematics IV  
- Engineering Mathematics V  
- Engineering Mathematics VI  
- Entrepreneurial Studies

**ACADEMIC PROGRESSION**  
Graduates may be admitted into Year 2 of Bachelor of Science (Honours) in Microelectronics (Embedded Technology).

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**  
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
Diploma in Science (Microelectronics with Automatic Control) 2 years

PROGRAMME OVERVIEW
This programme covers a wide range of topics in analogue and digital electronics, microcontrollers, programming, semiconductor devices, introduction to integrated circuit layout, programmable logic controller and PC instrumentation. The programme trains students in fundamental of circuit analysis and design in electronics, programming and control. It aims to develop students’ analytical and logical skills as well as good hands-on skills.

CAREER PROSPECTS
• Electronics Technicians
• Embedded Systems Technicians
• Service and Maintenance Personnel
• PC Control and Automation Personnel
• PLC Programmers
• Firmware Programmers

ACADEMIC PROGRESSION
Graduates may be admitted into Year 2 of Bachelor of Science (Honours) in Microelectronics (Embedded Technology).

PROGRAMME OUTLINE (TOTAL CREDITS: 94)
• Principles of Electric Circuits
• Basic Microprocessors
• Digital Logic Principles I
• Digital Logic Principles II
• PLC Programming and I/O Interface Circuits
• Circuits and Signals
• Programmable Controllers
• Analogue Electronics I
• Analogue Electronics II
• PC Instrumentation and Control
• Introduction to Integrated Circuit Layout
• Physics I
• Physics II
• Introduction to Semiconductor Devices and Fabrication
• Introduction to Programming
• Information Technology
• Software Design and Programming Techniques
• Engineering Mathematics I
• Engineering Mathematics II
• Engineering Mathematics III
• Engineering Mathematics IV
• Engineering Mathematics V
• Engineering Mathematics VI
• Entrepreneurial Studies

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular

Diploma in Sport and Exercise Science 2 years

PROGRAMME OVERVIEW
This programme is designed to cover the application of scientific principles on three branches of science – biomechanics, physiology and interdisciplinary approaches. The sports science area largely offers expert scientific backup for top sport training and performance, while exercise science has a central role in physical programmes aimed at improving general health. The qualified sport and exercise scientist can expect to have a broad technical and physiological knowledge, and stands to benefit from current developments within the field offering a professional status that is recognised worldwide. This programme covers a broad, multidisciplinary study of sport and exercise science. Students will be introduced the sports concepts and practices, principles of coaching, health and wellness, and various games in sports. Students will develop knowledge and understanding of how scientific methods can be used to examine sport and exercise activities in subjects such as anatomy and physiology, sports psychology, sport biomechanics as well as motor learning and development. Other topics include sports management, maintenance of sport facilities, sports injuries, legal and ethical issues in sports, and sports nutrition.

CAREER PROSPECTS
• Assistant Fitness Trainers
• Assistant Instructors
• Sport Administrators
• Sports Maintenance Personnel
• Junior Sales Executives

ACADEMIC PROGRESSION
Graduates may be admitted into Year 2 of Bachelor of Science (Honours) in Sports & Exercise Science.

PROGRAMME OUTLINE (TOTAL CREDITS: 91)
• Introduction to Sports Science
• Foundation of Fitness and Exercise
• Functional Human Anatomy
• Systemic Human Physiology
• Sports Management
• Basic Biomechanics
• Principles of Coaching
• Sport Injuries and First Aid
• Motor Learning and Development
• Health and Wellness
• Sports Nutrition
• Games I
• Games II
• Management and Maintenance of Sport Facilities
• Legal and Ethical Issues in Sports
• Sports Psychology
• Sport Sociology
• Introductory Statistics
• Introduction to Information Technology
• Basic Economic Principles
• Fundamentals of Marketing

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
**Diploma in Food Science** 2 years

**PROGRAMME OVERVIEW**

Food Science programme integrates and applies knowledge within disciplines such as chemistry, microbiology, engineering and nutrition to preserve, process, package, and distribute food products and design new processes to improve the safety and quality of foods. Food scientists develop new foods, add value to raw food commodities and improve the quality and safety of existing food products.

This programme provides students with the scientific knowledge and skills of the food chain and forms a link for those who wish to embark on a career in the dynamic food and nutrition industries. The programme covers basic principles in the basic sciences in relation to the study of food science as well as the application of basic science such as food chemistry, food microbiology, food technology and nutrition. The nutrition subjects provide knowledge and skills to understand diseases of dietary origin.

This programme also offers hands-on practices and prepares graduates with fundamental laboratory skills and techniques in food science, including those related to safety practices and standards, leading to the professionalism in the area of food science. Students will also be taught the basics of business and marketing. The better understanding of entrepreneurial skills can help graduates to take up challenges in the competitive food business.

**CAREER PROSPECTS**

- Food Manufacturing
- Food Production
- Food & Beverages
- Research & Development
- Sales & Marketing
- Food Services/Nutrition Personnel

**ACADEMIC PROGRESSION**

Graduates may be admitted into Year 2 of Bachelor of Science (Honours) in Food Science.

**PROGRAMME OUTLINE (TOTAL CREDITS: 94)**

- Physical Chemistry
- Organic Chemistry
- Inorganic Chemistry
- Analytical Chemistry
- Biology of the Cells
- Human Physiology
- Microbiology
- Introduction to Food Science
- Principles of Nutrition
- Introductory Foods
- Food Physics
- Food Chemistry
- Human Nutrition
- Food Toxicology
- Food Technology
- Food Microbiology
- Food Analysis
- Food Hygiene and Sanitation
- Pre-Calculus
- Calculus and Algebra
- Statistics and Operations Research
- Information Systems and Application
- Business Organisation and Management
- Fundamentals of Marketing

**Diploma in Aquaculture** 2 years

**PROGRAMME OVERVIEW**

This programme provides students with the scientific knowledge and skills in aquaculture and forms a link for those who wish to embark on a career in aquaculture industries. The programme covers a wide range of topics in aquaculture setup, water quality, system preparation, feed and nutrition, seed production and nursery, harvesting, aquaponics etc.

This programme also offers hands-on practices, fieldwork, industrial visit and prepares graduates with aquaculture skills and techniques, as well as analytical skills in laboratories, leading to the professionalism in the area of aquaculture. Students will also be taught the fundamentals of business and entrepreneurship to help the graduates to venture in aquaculture industries.

**CAREER PROSPECTS**

- Sales and Technical
- Hatchery Technician
- Farm Technician
- Laboratory Technician

**PROGRAMME OUTLINE (TOTAL CREDITS: 90)**

- Introduction to Aquaculture
- Aquaculture System and Practices
- Introduction to Entrepreneurship
- Commercial Aquaculture Species and Farming
- Site Selection, Design and Setup
- Aquaculture Environment and Water Quality
- Entrepreneurial Practices
- System Preparation, Stocking and Management
- Small Business Venture
- Aquaculture Engineering, Equipment and Tools
- Feed and Nutrition
- Live Food Species and Production
- Introduction to Seed Production and Nursery
- Grow-out Technologies and Practices
- Harvest, Processing and Post-Harvest
- Aquatic Animal Health
- Chemical and Drugs in Aquaculture
- Industrial Training

**Electives (Choose 3)**

- Introduction to Aquaponics
- Economics and Farm Management
- Computer Skills
- Information Technology and Systems
- Introduction to Organisation and Management
- Introduction to Human Resource Management

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

- English Language
- English for Communication
- Bahasa Kebangsaan A
- Pengajian Malaysia 2
- Public Speaking
- English for IELTS
- Civic Consciousness and Volunteerism, Co-curricular

**LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:**

- English Language
- Pengajian Malaysia 2
- English for Communication
- Bahasa Kebangsaan A
- English for IELTS
- Civic Consciousness and Volunteerism, Public Speaking, Co-curricular
Diploma in Information Technology (Entrepreneurship)  
2 years

PROGRAMME OVERVIEW
This programme provides students with the fundamental knowledge and skills of entrepreneurs, managerial skills and communication skills. It also provides students with the skills in creating new business opportunities, as well as other emerging trends of technological-based industries to be well prepared for the diverse set of skills required in the industry.

Elective courses like Mobile Web Development, Introduction to Mobile Game Development and Internet Programming will further enhance students’ concepts and skills in the area of technology and entrepreneurship as well as essential skills to pursue higher level of study and life-long learning.

This programme also equips students with strong elements of analytical and critical thinking in order for the students to obtain the essential skills required to become IT entrepreneurs and start a new IT based business venture.

Students will also have the opportunity to experience 9 weeks of industrial training in related industry. The aim is to expose students to real-life projects in the aspects of IT Entrepreneurship. Such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
• Technology Evaluators
• IT Entrepreneurs
• Business Development Executives
• Assistant E-Commerce Consultants

PROGRAMME OUTLINE (TOTAL CREDITS: 92)

<table>
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<th>Entrepreneurial Practices</th>
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</thead>
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<td>Introduction to Technopreneurship</td>
<td>Fundamental of Marketing</td>
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<tr>
<td>Introductory Business Accounting</td>
<td>Business and Cyber Law</td>
</tr>
<tr>
<td>Inventive Problem Solving</td>
<td>Electronic Commerce</td>
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<tr>
<td>Accounting Software Packages</td>
<td>Mobile Commerce and Marketing</td>
</tr>
<tr>
<td>Introduction to Database</td>
<td>Small Business Venture</td>
</tr>
<tr>
<td>Introductory Statistics</td>
<td>Industrial Training</td>
</tr>
<tr>
<td>System Analysis and Design</td>
<td>Elective I (Choose 1)</td>
</tr>
<tr>
<td>Web Design and Development</td>
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</tr>
<tr>
<td>Multimedia Technology</td>
<td>Programming II</td>
</tr>
<tr>
<td>Introduction to Human Resource Management</td>
<td>Elective II (Choose 1)</td>
</tr>
<tr>
<td>Essentials of Finance Management</td>
<td>Introduction to Mobile Game Development</td>
</tr>
<tr>
<td></td>
<td>Internet Programming</td>
</tr>
</tbody>
</table>

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, Pengajian Malaysia 2, English for Communication, Bahasa Kebangsaan A, English for IELTS, Civic Consciousness and Volunteerism, Public Speaking, Co-curricular

Diploma in Information Technology (ICT Systems Support)  
2 years

PROGRAMME OVERVIEW
This programme trains students in the area of ICT Systems Support which includes information and communication technologies, system installation and configuration, system troubleshooting and maintenance, ICT user support, computer operational procedures and computer security. Students will also be trained in the area of software and information systems development and database management. These core areas are the most basic knowledge and skills required for students in their future workplace and study.

Students will also have the opportunity to experience 9 weeks of industrial training in related industry. The aim is to expose students to real-life projects on software development and implementation process. Such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
• Entry-level User Support Specialists
• Help-desk Support Staffs
• IT Executives
• Junior Programmers
• Assistant Systems Analysts
• Assistant Database Administrators

PROGRAMME OUTLINE (TOTAL CREDITS: 91)

<table>
<thead>
<tr>
<th>Information Technology</th>
<th>Cloud Computing for Business</th>
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<tbody>
<tr>
<td>Introduction to IT Entrepreneurs</td>
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<td>Electronic Commerce</td>
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<tr>
<td>Mobile Commerce and Marketing</td>
<td>Elective I (Choose 1)</td>
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<tr>
<td>Industrial Training</td>
<td>Principles of Information Systems</td>
</tr>
<tr>
<td>Elective I (Choose 1)</td>
<td>Web Systems and Technologies</td>
</tr>
<tr>
<td>Mobile Web Development</td>
<td>Business Organisation and Management</td>
</tr>
<tr>
<td>Programming II</td>
<td>Elective III (Choose 1)</td>
</tr>
<tr>
<td>Elective II (Choose 1)</td>
<td>Mobile Application Development</td>
</tr>
<tr>
<td>Introduction to Mobile Game Development</td>
<td>Web Application Programming</td>
</tr>
</tbody>
</table>

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:

English Language, English for Communication, Bahasa Kebangsaan A, Pengajian Malaysia 2, Public Speaking, English for IELTS, Civic Consciousness and Volunteerism, Co-curricular
Diploma in Information Technology (Mobile Application Development) 2 years

PROGRAMME OVERVIEW
The Diploma in Information Technology (Mobile Application Development) programme produces graduates with the technical knowledge for working in the mobile application industry. This programme will equip students with multi-skills applicable to the industry in different mobile application sectors. Graduates of this programme have vast potential to find employment in any industry.

Students will also have the opportunity to experience 9 weeks of industrial training in related industry. The aim is to expose students to real-life projects on software development particularly in the area of mobile application development. Such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- Junior Mobile Solution Specialists
- Junior Web Developers
- Junior Mobile Application Developers
- Junior Technical Supports

- Junior Application Programmers
- Junior Software Engineers
- Junior Web Developers

PROGRAMME OUTLINE (TOTAL CREDITS: 92)
- Problem Solving and Programming Technology
- Introduction to Information Technology
- Web Development
- Introduction to Interface Design
- Systems Analysis and Design
- Database Development and Applications
- Web-based Multimedia Applications
- Mobile Commerce and Marketing Techniques
- Object-Oriented Programming Techniques
- Introduction to Computer Systems Architecture
- Fundamentals of Computer Networks
- Mobile Application Development I
- Probability and Statistics
- Operating Systems
- Mobile Application Development II
- Mobile Web Development
- Industrial Training
- Elective I (Choose 1)
  - Introduction to Spreadsheet
  - Introduction to Word Processing
  - Advanced Java Programming

Diploma in Computer Science (Data Science) 2 years

PROGRAMME OVERVIEW
This programme prepares students to work in an exciting career and profession in the area of computer science specialized in data science. It aims to produce graduates with fundamental knowledge in computer science, analytical methods relevant to modern applications which require large-scale data analysis as well as concepts and techniques of data science. Graduates can apply the knowledge and skills learnt to solve Big Data problems in a variety of disciplines. This programme provides a platform that allows students to learn the knowledge of C, Java and Python, assembly language, XHTML, CSS, JavaScript and SQL, which are the basic skills required by students to develop software or information systems to capture and analyse massive amounts of data across a range of organisations. Students will be trained in various software and information systems development technologies. Introduction to Data Science, Data Mining and Big Data Techniques which emphasize on mathematical approach to the computational analysis of data are also introduced so students are able to draw upon the mathematics of both computation and probability to make use of the large amounts of data that are collected in order to solve major problems in their future workplace.

Elective courses like Mobile Application Development, Web Systems and Technologies, Windows Application Programming, Advanced Java Programming, Electronic Commerce and Fundamentals of Artificial Intelligence will be offered to students undergoing this programme.

Students will also have the opportunity to experience 9 weeks of industrial training in related industry. The aim of the industrial training is to expose students to real-life projects on software development and fundamentals of data science. Such training will add value to their qualification and increase their employment opportunities.

CAREER PROSPECTS
- Junior Data Scientists
- Junior Data Analysts
- Junior Programmers
- Junior Web Developers
- Junior Multimedia Developers
- Junior Mobile Application Developers
- Junior Software Engineers
- Junior Network Engineers
- Assistant Systems Analysts
- Assistant Database Administrators
- Assistant IT Consultants

PROGRAMME OUTLINE (TOTAL CREDITS: 93)
- Problem Solving and Programming Technology
- Introduction to Information Technology
- Calculus and Algebra
- Web Design and Development
- Systems Analysis and Design
- Statistics I
- Database Development and Applications
- Introduction to Data Science
- Data Driven Marketing
- Statistics II
- Discrete Mathematics
- Data Science with Python
- Introduction to Data Mining
- Object-Oriented Programming Techniques
- Computer Systems Architecture
- Fundamentals of Computer Networks
- Big Data Techniques
- Operating Systems
- Industrial Training
- Mobile Application Development
- Web Systems and Technologies
- Windows Application Programming
- Advanced Java Programming
- Elective I (Choose 1)
- Elective II (Choose 1)
- Elective III (Choose 1)
- Electronics Commerce
- Fundamentals of Artificial Intelligence

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
- English Language, Pengajian Malaysia 2, English for Communication, Bahasa Kebangsaan A, English for IELTS, Civic Consciousness and Volunteerism, Public Speaking, Co-curricular

LANGUAGE, MATA PELAJARAN PENGAJIAN UMUM (MPU) AND CO-CURRICULAR COURSES:
- English for IELTS, Public Speaking, English Language, English for Communication, Pengajian Malaysia 2, Bahasa Kebangsaan A, Civic Consciousness and Volunteerism, Co-curricular